PISCeS 2023 eDNA Conference Agenda
Full Schedule of Lightning talks, Oral presentations, and Panel discussions
June 18-20

Version v.2

Welcome to the 2023 **P**athway to **I**ncrease **S**tandards and **C**ompetency of **e**DNA **S**urveys International Conference at the University of Guelph. All events will take place across campus in the Summerlee Science Complex (SSC), Rozanski Hall (ROZH), and Creelman Hall (CRLM) buildings.

Sunday, June 18th

ROZH 103

Lightning talks – Group 1			
Time	**Presenter**	**Title**	**Institution**
4:45 – 5:45 PM	X. Wang	Processes Driving Individual Variation in Environmental DNA Production Rates in *ß*	University of Guelph
	Chloé Berger	Experimental study of the ecology of environmental DNA and RNA in aquatic environment using an invasive species	Université Laval
	Kate Sheridan	Pacific eDNA Coastal Observatory: standardizing eDNA sampling to track biodiversity at a biogeographic scale	McGill University
	Markelle Morphet	Classifying agricultural drains using fish communities: Comparison of conventional and eDNA methods	University of Toronto
	Marie-Pier Brochu	Monitoring lake sturgeon (*Acipenser fulvescens*) spawning grounds using environmental DNA	Institut national de la recherche scientifique
	Michael Allison	Application of Novel eDNA Methods to Determine Distribution and Estimate Biomass of Oolichan on the Pacific Coast of North America	University of Victoria
	Meredith Pochardt	Using eDNA to Leverage Tribal Monitoring of an Important Subsistence Species, Eulachon (*Thaleichthys pacificus*), on a Broad Geographic Scale	University of Victoria
	Marion Chevrinais	Environmental DNA detections increase the distribution of the landlocked harbour seal from Lacs des Loups Marins (Québec, Canada)	DFO
	M. Grace Gallant	Community science validated eDNA surveys determine two species of freshwater mussels are of conservation concern on Prince Edward Island (Canada)	University of Prince Edward Island
	Gabe Pelletier	Invasive Species Monitoring in Massachusetts Lakes and Ponds	Stantec Consulting Ltd

Monday, June 19th

ROZH 103

Lightning talks – Group 2			
Time	**Presenter**	**Title**	**Institution**
8:30 – 9:30 AM	Rina Guxholli	Environmental DNA Applications: Developing Species-Specific Cytochrome B qPCR Assays for Canadian Freshwater Fishes	University of New Brunswick
	Neha Acharya-Patel	Are you there? Addressing challenges of monitoring closely related rockfish in marine conservation areas using environmental DNA methods	University of Victoria
	Kathleen Nolan	Bloomin' Barcodes: High-Throughput Biodiversity Assessment of Freshwater Harmful Algal Blooms	University of Guelph
	Daniela Sturm	Metabarcoding reveals the (not so true) extent of protist biogeography in the Southern Indian Ocean	Marine Biological Association UK
	Nathanael Harper	Development and evaluation of eDNA metabarcoding workflows to detect amphibian communities within vernal pools of the Grand River watershed.	University of Waterloo
	J. Feller	Combining Taxa, Trait, and Function: An eDNA Assessment of Acid-Mine Drainage Impacted Streams using Water and Leaf Litter	US Forest Service, Intermountain Region
	Rob Young	In silico Conceptual Framework for Targeted eDNA Detection	University of Guelph

Oral presentations – Group 1			
Time	**Presenter**	**Title**	**Institution**
11:30 AM	Dirk Steinke	BIOSCAN and others: how large scale biodiversity surveys build the reference libraries eDNA studies need	University of Guelph
11:45 AM	Mehrdad Hajibabaei	Is eDNA good enough? implications for science and society	University of Guelph

Monday, June 19th
ROZH 103

Panel discussion – eDNA STANDARDS, GUIDELINES, AND PROFICIENCY TESTING			
Time	**Presenter**	**Title**	**Institution**
1:00 PM	Caren Helbing	Introduction	University of Victoria
1:15 PM	Alejandro Trujillo-González	Best practice guidelines for Australian/New Zealand eDNA biomonitoring programs	University of Canberra
1:45 PM	Florian Leese	Advancing biodiversity monitoring with environmental DNA: From method innovation to implementation across terrestrial and aquatic ecosystems	University of Duisburg-Essen
2:00 PM	Rachel Meyer	eDNA Explorer: webtools for enabling sequence data integration, exploration, and collaboration	University of California Santa Cruz
2:15 PM	Ken Clogg-Wright	The ABC's of National Accredited Standardization and its Application to Environmental DNA	CSA Group
2:25 PM		Discussion	

Panel discussion – INVASIVE SPECIES AND SPECIES-AT-RISK			
Time	**Presenter**	**Title**	**Institution**
3:30 PM	Margaret Docker	Introduction	University of Manitoba
3:35 PM	Cameron Brown	Validation of eDNA Protocols for Large-scale Monitoring of the Invasive Sea Lamprey	University of Guelph
3:45 PM	Adam Sepulveda	READI-Net: An automated eDNA surveillance network for rapid detection of aquatic invasive species	Geological Survey Northern Rocky Mountain Science Center
4:00 PM	Richard Lance	eDNA Detection of Nonindigenous Black Carp in the Mississippi River Watershed	US Army Engineer Research and Development Center
4:15 PM	Stephanie Coghlan	Community eDNA metabarcoding as a detection tool for aquatic invasive plant species	MNRF Ontario
4:30 PM	Yoamel Milián-García	eDNA metabarcoding for biosurveillance of plant invasive insect alien species using saturated salt trap solutions.	University of Guelph
4:45 PM	Danielle Bourque	Multiple Lines of Evidence Required to Confirm SAR Presence at a Wetland Remediation Site	SLR Consulting Ltd
5:00 PM	Tzitziki Loeza-Quintana	Comparison of targeted qPCR and metabarcoding eDNA detections of Redside Dace (*Clinostomus elongatus*) in the Greater Toronto Area	University of Guelph and SLR consulting Ltd
5:15 PM		Discussion	

Tuesday, June 20th

ROZH 103

Oral presentations – Group 2 Applied, Policy, and Regulatory Applications			
Time	**Presenter**	**Title**	**Institution**
8:30 AM	Sherry Walker	Applied application of eDNA to manage invasive Zebra and Quagga Mussels in aquarium moss bolls	DFO
8:45 AM	Stephen Spear	Development and Validation of Point of Use LAMP Assays to Detect Dreissenid Mussels on Aquarium Moss Balls	Upper Midwest Environmental Sciences Center
9:00 AM	Heather Bears	eDNA Metabarcoding as an Emerging Tool for Informing Biodiversity Impact Studies	Zoetica and NWMO
9:15 AM	Cathryn Abbott	NAMERS: a purpose-built reference DNA sequence database to support actionable eDNA metabarcoding	DFO
9:30 AM	Guillaume Côté	The integration of eDNA in the management of species in Québec	MELCCFP
9:45 AM	Amanda Smith	Applied eDNA Outcomes in Terrestrial and Aquatic Environments from Australia to Canada	GHD Limited

Panel discussion 3 – eDNA DATA ARCHIVAL			
Time	**Presenter**	**Title**	**Institution**
10:20 AM	Bob Hanner	Introduction	University of Guelph
10:30 AM	Tobias Frøslev	eDNA metabarcoding data in GBIF.org	GBIF
10:45 AM	Christopher Meyer	Challenges and Progress with Developing NMNH's Environmental Sample Collection	Smithsonian Institution
11:05 AM	Roger Bull	Environmental DNA Archiving at the National Biodiversity Cryobank of Canada	Canadian Museum of Nature
11:15 AM	Anaïs Lacoursière-Roussel	GOTeDNA: the centralized interactive guidance on optimal timing for eDNA	DFO
11:30 AM	D.W Mulholland	Conservation – A Sustainable Data Viewpoint	University of Waterloo
11:35 AM	Sujeevan Ratnasingham	BOLD and mBRAVE	University of Guelph
11:45 AM		Discussion	

Tuesday, June 20th

ROZH 103

Oral presentations – Group 3 Conservation			
Time	**Presenter**	**Title**	**Institution**
2:00 PM	Michaela Harris	eDNA and Acoustic Tag Monitoring Reveal Congruent Overwintering Distributions of Striped Bass in a Hydrologically Complex Estuarine Environment	DFO
2:15 PM	Matt Lemay	Paired environmental DNA and dive surveys provide distinct but complementary snapshots of marine biodiversity in a coastal fjord	Hakai Institute
2:30 PM	Ben Millard-Martin	Using metabarcoding on complex seascapes: considerations of habitat variability and seawater movement	McGill University
2:45 PM	Nathaniel Marshall	Environmental DNA metabarcoding for the detection of threatened and endangered unionid freshwater mussels	Stantec Consulting Ltd
3:00 PM	Alexander Van Nynatten	Identifying and quantifying larval fishes using DNA metabarcoding	University of Toronto
3:15 PM	Gerald Tetreault	Congruency of environmental DNA (eDNA) metabarcoding approach to conventional fish communities assessments in low order streams	Environment and Climate Change Canada

Oral presentations – Group 4 Methods Development & Bioinformatics			
Time	**Presenter**	**Title**	**Institution**
3:45 PM	Heather Veilleux	Optimising eDNA and eRNA approaches for monitoring freshwater fish	University of Alberta and Ecometrix Incorporated
4:00 PM	Morgan Hocking	Environmental DNA methods development and application in environmental consulting: a collaboration between Ecofish Research, University of Victoria, and Bureau Veritas	Ecofish Research Ltd
4:15 PM	Andrew Taylor	Bats in Buildings – Airborne eDNA	Stantec Consulting Ltd
4:30 PM	Nina Garrett	Out of thin air: surveying tropical bat roosts through air sampling of eDNA	York University
4:45 PM	Devin Jones	Fine-scale temporal variation in freshwater fish communities detected using metabarcoding of eDNA samples	Geological Survey Northern Rocky Mountain Science Center
5:00 PM	Annette Govindarajan	Diversifying eDNA sampling platforms and strategies in the ocean's midwater realm	Woods Hole Oceanographic Institution
5:15 PM	Geneviève Parent	Maximizing the reliability and the number of species assignments in metabarcoding studies using a curated regional library and a public repository	DFO
5:30 PM	Eden Tekwa	Effects of spatial sampling and correction on detecting community change in a Pacific eDNA invertebrate dataset	McGill University